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(54) Title: FUNCTIONAL TRANSITION METAL SILICATES (FTMS)

(57) Abstract: The present invention provides a functional transition metal silicate (FTMS) effective as a decontaminant, an insecticidal, a detoxificant, a protectant, a microbicide or combination thereof, comprising a ratio of transition metal to silica in the transition metal silicate in a predetermined range and a structural composition for said effectiveness, said FTMS being capable of being immobilized on a suitable materials or incorporating into resins and / or coating along with resins on suitable materials.